

REMARKS

Applicants have carefully examined the Office Action mailed August 27, 2003. Claim 28 has been cancelled, without prejudice. Claims 25, and 30-34 are pending. No new matter has been added. Applicants respectfully request favorable reconsideration in light of the above amendments and the following comments.

Claim Rejections—35 U.S.C. § 102

Remaining claims 25, 30, and 34 have been rejected by the Examiner under 35 U.S.C. § 102(e) as being anticipated by Santoianni et al. (U.S. Patent No. 6,270,476). It is also somewhat apparent, but not clear, that the Examiner may have intended to reject claim 31 under 35 U.S.C. § 102(e) as being anticipated by Santoianni et al. Applicants respectfully traverse these rejections, to the extent that they are maintained.

As an initial matter, all of the remaining claims are directed to a guidewire system including a first wire and a second wire, and threaded structure adapted to provide threading engagement between an end of the first wire and an end of the second wire.

Santoianni et al. does not disclose a guidewire system including a first wire and a second wire, but rather Santoianni et al. discloses a catheter for ablating tissue. While in one embodiment, Santoianni et al. does disclose a distal segment 20 that is adapted to removably receive one or more auxiliary shaft segments 70 (see, e.g., Figures 6 and 6a and Column 8, line 57 through Column 10, Line 33), Santoianni et al. does not disclose a guidewire system including a first wire and a second wire.

Additionally, independent claim 25 recites that the first wire includes a body member comprising a wall defining a lumen, and a female threaded member disposed within the lumen proximate a first end of the body member. The second wire includes a male thread disposed about the body member of the second wire proximate the second end, and a portion of the male thread is adapted to deform when the male thread threadingly engages the female thread of the first wire.

Santoianni et al. does not teach or suggest anything about a male thread that includes a portion that is adapted to deform when the male thread threadingly engages a

female thread. Santoianni et al. merely disclose male/female threaded connection between a distal segment of a catheter shaft and one or more auxiliary shaft segments.

The Examiner seems to indicate in the Final Office Action that this deformation of a portion of the male thread is somehow an inherent feature of Santoianni et al.

Applicants respectfully disagree. Regarding inherency, the Board of Patent Appeals and Interferences has specified:

In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art. *Ex parte Levy*, 17 USPQ2d 1416, 1464, (Bd. Pat. App. & Inter. 1990); (See also, MPEP 2112).

Additionally, the Federal Circuit has stated:

To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter in necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’’ *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed Cir. 1999); (See also, MPEP 2112).

The Federal Circuit has further stated:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed Cir. 1993); (See also, MPEP 2112).

Applicants respectfully submit that it is not inherent that a male/female threaded connection, for example the one generically disclosed in Santoianni et al, would necessarily include a male thread including a portion that is adapted to deform. Furthermore, the Examiner has provided no evidence that this missing descriptive matter (i.e. a male thread including a portion that is adapted to deform) is necessarily present in the threaded connection disclosed in Santoianni et al. For each of these reasons, Santoianni et al. does not disclose each and every element of the claimed invention, and applicants respectfully submit that claim 25 is in condition for allowance.

Independent claim 30 recites that the male thread is adapted to threadingly engage the female thread and includes a first portion and a second portion which is different from

the first portion. The second portion is adapted to deform when threaded into the female thread.

Similar to the discussion above, Santoianni et al. does not disclose a male thread including a first portion and a second portion which is different from the first portion, much less that the second portion is adapted to deform when threaded into the female thread. These elements are simply not taught or suggested in Santoianni et al. Furthermore, similar to the discussion above, such structures and characteristics are not inherent in the male/female threaded connection disclosed Santoianni et al. The generic disclosure of a male/female threaded connection in Santoianni et al. does not necessitate the claimed structure, and as such, the claimed structure cannot be inherent in Santoianni et al.. Therefore, applicants respectfully submit that claim 30 is also allowable over Santoianni et al. for at least these reasons.

Dependent claim 31 depends from claim 30, and therefore is allowable over Santoianni et al. for the reasons discussed above regarding claim 30. Additionally, claim 31 includes additional subject matter - in particular, claim 30 recites that the deformation of the second portion of the male thread acts to inhibit rotation of the first wire member relative to the second wire member. The Examiner specifically cites the abstract and Column 10, Lines 24-36 of Santoianni et al. as disclosing this. However, a review of these portions of Santoianni et al. fails to reveal any such disclosure. Applicants submit that Santoianni et al. does not teach or suggest a male thread including a first portion and a second portion which is different from the first portion wherein the second portion is adapted to deform when threaded into the female thread, and that the deformation of the second portion of the male thread acts to inhibit rotation of the first wire member relative to the second wire member. Therefore claim 31 is also allowable over Santoianni et al.

Independent claim 34 also recites a guidewire system, including a first wire having a first end and a second wire having a second end. Claim 34 further recites means for coupling the first end of the first wire to the second end of the second wire. The means includes a female thread and a male thread adapted to threadingly engage, the male thread including a first portion and a second portion that is different from first portion and that is adapted to deform when threadingly engaged with the female thread.

The “means for coupling” is means-plus-function language invoking 35 U.S.C. § 112 paragraph 6. Thus this element covers the corresponding structure described in the specification and equivalents thereof. Santoianni et al. does not disclose the claimed means, or an equivalent thereof. Specifically, nothing in Santoianni et al. discloses a means for connecting that includes a male thread including a first portion and a second portion that is different from first portion and that is adapted to deform when threadingly engaged with the female thread. There simply is no such structure in Santoianni et al.. Additionally, as discussed above, such structures and characteristics are not inherent in the male/female threaded connection disclosed Santoianni et al. As such, claim 34 is also allowable over Santoianni et al. for at least these reasons.

Claim Rejections—35 U.S.C. § 103

Dependent claims 32 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Santoianni et al. Applicants respectfully traverse these rejections.

Dependent claims 32 and 33 depend from independent claim 30, and are therefore allowable over Santoianni et al. for the reasons discussed above regarding claim 30. These claims also include additional subject matter. Specifically, claim 32 recites that the second portion of the male thread includes a different thread pitch from the first portion of the male thread, and claim 33 recites that the second portion of the male thread includes a different thread size from the first portion of the male thread.

To establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art. (see, MPEP §2143 and §2143.03). Nothing in Santoianni et al. teaches or suggests the structures claimed in claims 32 and 33 (or claims 25, 30, 31 or 34, for that matter).

Furthermore, to establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. (see, MPEP §2143 and §2143.01). Upon reading Santoianni et al., there is no suggestion or motivation to modify the generic threaded structures disclosed therein. There is no suggestion or motivation to provide a male thread that has two portions different from one another, much less suggest or motivate one to provide one portion such that is adapted to deform

when threaded into the female thread. And Santoianni et al. certainly does not suggest or motivate one to provide a portion of the male thread that includes a different thread pitch or a different thread size from the other portion.

In the Final Office Action, the Examiner stated that “[i]t would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the thread of Santoianni et al. device with a different thread pitch and a different thread size ...” However, this does not meet the requirements of a *prima facie* case of obviousness. There is simply no teaching or suggestion of all the claim limitations in Santoianni et al., as required, and Santoianni et al. does not provide the necessary suggestion or motivation to one of ordinary skill in the art to modify the structure disclosed in Santoianni et al.

Therefore, no *prima facie* case of obviousness has been made to render claims 32 and 33 (or for that matter, any of the pending claims) obvious in view of Santoianni et al.

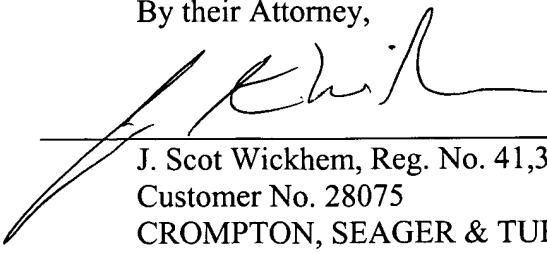
Reconsideration of the outstanding rejections is respectfully requested.
Applicants submit that all pending claims are in condition for allowance. A Notice of Allowance in due course is respectfully requested. If a telephone conference may be of assistance, please contact the undersigned attorney at 612-677-9050.

Respectfully submitted,

BRIAN K. BALZUM ET AL.

By their Attorney,

Date: October 27, 2003



J. Scot Wickhem, Reg. No. 41,376
Customer No. 28075
CROMPTON, SEAGER & TUFTE, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, Minnesota 55403-2420
Telephone: (612) 677-9050
Facsimile: (612)359-9349